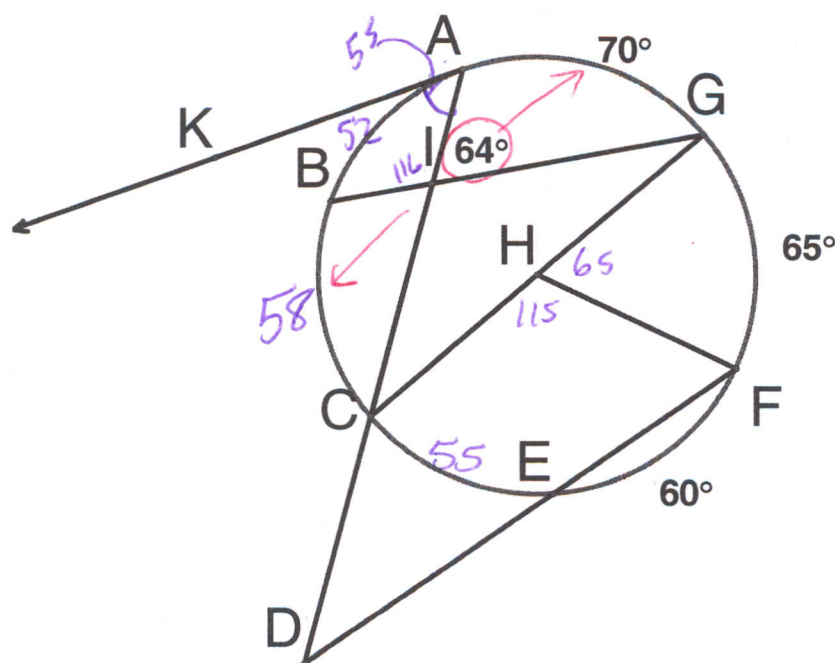


Key

202 Angle Review Picture



\overline{CG} is the diameter

\overline{KA} is tangent to $\odot H$

Find the measures of the following arcs and angles. Make sure you think about what kind of angle it is before you find it. (Central, inscribed, inside, or outside)

Find:

$$\text{mCE} = \overbrace{55}^{128} \quad 64 = \frac{1}{2}(70+x) \quad \begin{matrix} 128 = 70+x \\ -70 \\ \hline 58 \end{matrix}$$

$$\widehat{mCB} = 58$$

$$\widehat{mAB} = 52$$

$$m\angle ACG = \frac{1}{2}70 = 35$$

$$m\angle D = 40 \quad \frac{1}{2}(135 - 55)$$

$$m\angle GHF = 65 \quad = \text{arc}$$

$$m\angle FHC = 115 = \text{arc } 59 + 60$$

$$m\angle AIB = 116 \quad \text{or} = \frac{1}{2}(52 + 55 + 60 + 65)$$

$$m\angle KAC = \frac{1}{2}(110) = 55$$

$$m\angle BGC = \frac{1}{2}(58) = 29$$

10-8 Skills Practice

Equations of Circles

Write an equation for each circle.

1. center at origin, $r = 6$

$$x^2 + y^2 = 36$$

2. center at $(0, 0)$, $r = 2$

$$x^2 + y^2 = 4$$

3. center at $(4, 3)$, $r = 9$

$$(x-4)^2 + (y-3)^2 = 81$$

4. center at $(7, 1)$, $d = 24$

$$(x-7)^2 + (y-1)^2 = 144$$

5. center at $(-5, 2)$, $r = 4$

$$(x+5)^2 + (y-2)^2 = 16$$

6. center at $(6, -8)$, $d = 10$

$$(x-6)^2 + (y+8)^2 = 25$$

7. a circle with center at $(8, 4)$ and a radius with endpoint $(0, 4)$

$$64 = (x-8)^2 + (y-4)^2$$

$$(0-8)^2 + (4-4)^2$$

8. a circle with center at $(-2, -7)$ and a radius with endpoint $(0, 7)$

$$r^2 = (0+2)^2 + (7+7)^2$$

$$4 + 196$$

$$200$$

$$200 = (x+2)^2 + (y+7)^2$$

9. a circle with center at $(-3, 9)$ and a radius with endpoint $(1, 9)$

$$16 = (x+3)^2 + (y-9)^2$$

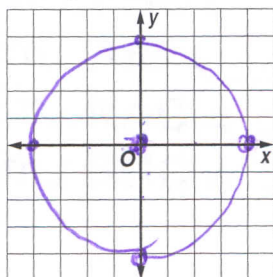
10. a circle whose diameter has endpoints $(-3, 0)$ and $(3, 0)$

$$x^2 + y^2 = 9$$

$$C(0,0)$$

Graph each equation.

11. $x^2 + y^2 = 16$



12. $(x-1)^2 + (y-4)^2 = 9$

